



## POWER LITHIUM BATTERIES

# Dual Purpose Deep Cycle Starting Lithium Battery

# LFP12.8VDIN77H

# Starting / Deep cycle

# Features of LiFePO4 Battery

#### Longer Cycle Life

LiFePO4 batteries would be is five times than SLA batteries on cycle life

#### High Power & Light weight

LiFePO4 batteries performance twice power of SLA batteries, while half weight helpful for transport and installation

#### Intelligent management control

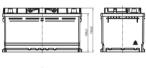
Intelligent BMS system covered by LFP batteries to ensure that batteries work on safety and perfect condition

#### Lower Self-discharge rate

Lower Self-discharge rate to guarantee LFP batteries be stored more longer than SLA batteries



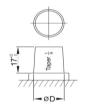
### **Physical Dimension**



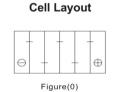
Chemistry



#### **Standard Terminal**



LiFePO4



### Electrical Characteristics

Standard Charge

	,	
	Nominal Voltage	12.8V
	Nominal Capacity	80Ah
	Energy	1024Wh
	Cold Cranking Amps	1600CCA
	Internal Resistance	≤2.2 mΩ
	Cycle Life	≥1500 cycles
	Self Discharge Rate	≤30uA
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96-99% @1C
	Charge Voltage	14.6±0.2V
	Charge Mode	0.2C to 14.6V, then 14.6V, charge current to 0.02C (CC/CV)
	Rated Charge Current	≤40A
	Max. Charge Current	≤80A
	BMS Charge Cut-off Voltage	15.6V
	Over Charge Recovery Voltage	15.2V
	Continuous Discharge Current	≤180A
	Instantaneous Discharge Current	1600A(5S)
	BMS Discharge Cut-off Voltage	8V
	Over Discharge Recovery Voltage	9.2V
	Charge Temperature	0 °C to 45 °C (32Fto 113F) @60±25% Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	0 °C to 40 °C (32Fto 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP56
	BMS Withstand voltage value	30V
	Plastic Case	ABS
	Dimensions (in./mm.)	315*174*190*190mm ± 2mm

8.0kg(17.6lbs)

**Brass** 

Mechanical

Weight (lbs./kg.)

Terminal



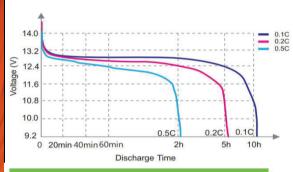
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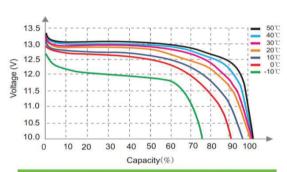
LFP12.8VDIN77H

Starting / Deep cycle

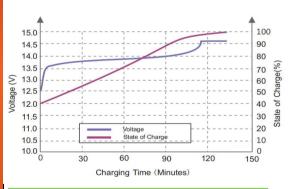
#### Different Rate Discharge Curve(25℃)



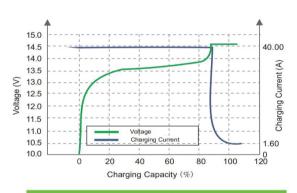
#### **Different Temperature Discharge Curve(0.5C)**



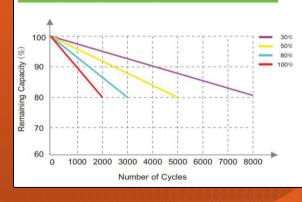
#### State of Charge Curve(0.5C, 25℃)



Charging Characteristics(0.5C, 25℃)



#### Different DOD Discharge Cycle Life Curve(0.5C)



**Different Temperature Self Discharge Curve** 

